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In the Claims:

No claim amendments are currently being presented; however, a complete listing of all pending claims, and their status, is included.

Listing of Claims

1-39 (Previously Canceled).

40. (Original) A defrostable ventilation apparatus, for exchanging air between the interior and exterior of a building, for transferring water moisture and sensible heat between exhaust air taken from the building and fresh air taken from the exterior ambient air for delivery to the building, and wherein air from the interior of the building is used as defrost air to defrost the ventilation apparatus, said ventilation apparatus comprising
fresh air path means having a fresh air intake side and a fresh air discharge side,
exhaust air path means having an exhaust air intake side and an exhaust air discharge side,
an exchanger comprising
a desiccant exchanger element for transfer of water moisture and sensible heat between said exhaust air and said fresh air,
and
a sensible heat exchanger element for transfer of sensible heat between said exhaust air and said fresh air,
said desiccant exchanger element comprising a rotary exchanger wheel configured and rotatably disposed so as to define a second air stream path and a third air stream path,
said second air stream path defining a portion of said fresh air path means and
said third air stream path defining a portion of said exhaust air path means,
said sensible heat exchanger element comprising
a first air path defining a portion of said fresh air path means and a fourth air path defining a portion of said exhaust air path means,

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said first and second air stream paths defining respective portions of said fresh air path means between the intake and discharge sides of said fresh air path means,
said third and fourth air stream paths defining respective portions of said exhaust air path means between the intake and discharge sides of said exhaust air path means,
said fresh air path means and said exhaust air path means being disposed and configured such that during a ventilation cycle,

exhaust air entering the exhaust air intake side flows through said third air stream path and then through said fourth air stream path and

fresh air entering said the fresh air intake side flows through said first air stream path and then through said second air stream path,

said ventilation apparatus including

a rotation component for inducing rotation of said exchanger wheel through said fresh air path means and said exhaust air path means,

defrost air path means for conveying defrost air to said fresh air intake side, said defrost air path means being configured to connect the exhaust air discharge side with the fresh air intake side for conveying defrost air to said fresh air intake side from said exhaust air discharge side,

a damper component, said damper component being displaceable between a ventilation configuration for a ventilation cycle

wherein said defrost air path means is closed off and said fresh air intake side and exhaust air discharge side are open,

and a defrost configuration for a defrost cycle

wherein said fresh air intake side and said exhaust air discharge side are closed off, and said defrost air path means is open,

and wherein

during a ventilation cycle, when said damper component is in said ventilation configuration,

fresh air is able to flow through said fresh air path means and exhaust air is able to flow through said exhaust air path means,

and

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during a defrost cycle, when said damper component is in said defrost configuration, defrost air taken from the building, is able to circulate, for delivery back into the building, through said exhaust air intake side, through said third air stream path, through said fourth air stream path, then through said defrost air path means, through said first air stream path, through said second air stream path and through said fresh air discharge side.

41. (Original) A ventilation apparatus as defined in claim 40 including a defrost rotation component for inducing, during a defrost cycle, said rotary exchanger wheel to rotate at a rotational speed of from 0 to 2 rpm.

42. (Original) A ventilation apparatus as defined in claim 40 including a component for stopping, during a defrost cycle, said rotary exchanger wheel from rotating.

43. (Original) A ventilation apparatus as defined in claim 42 wherein said rotation component comprises an electric motor and said component for stopping the rotation of said exchanger wheel comprises an electric switch configured so as to be able to de-energize said motor during a defrost cycle.

44. (Original) A ventilation apparatus as defined in claim 40 wherein said sensible heat exchanger element comprises air-to-air heat exchanging walls between said first and fourth air paths.

45. (Original) A ventilation apparatus as defined in claim 44 wherein said sensible heat exchanger element is of a rectangular parallelepiped shape, the first and fourth air paths thereof are disposed at right angles to each other and said sensible heat exchanger element is so disposed such that the first and fourth air paths are diagonally oriented so that they are self draining.

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46. (Original) A ventilation apparatus as defined in claim 40 wherein said sensible heat exchanger element is a rotary sensible heat exchanger wheel configured and rotatably disposed so as to define said first and fourth air stream paths and said apparatus includes a rotation component for inducing rotation of said sensible heat exchanger wheel through said fresh air path means and said exhaust air path means.

47. (Original) A ventilation apparatus as defined in claim 40 wherein said fresh air path means includes a fan for moving fresh air through said fresh air path means and said exhaust air means includes a fan for moving exhaust air through said exhaust air path means.

48. (Original) A ventilation apparatus as defined in claim 40 wherein said damper means comprises a first damper component and a second damper component,
said first damper component being displaceable between
a ventilation configuration
wherein said defrost air path means is closed off and said fresh air intake side is open and
a defrost configuration
wherein said defrost air path means is open and said fresh air intake side is closed off
and said second damper component being displaceable between
a ventilation configuration
wherein said exhaust air discharge side is open and
a defrost configuration
wherein said exhaust air discharge side is closed off,
and wherein
during a ventilation cycle, when said first and second damper components are in said respective ventilation configurations,

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fresh air is able to flow through said fresh air path means and exhaust is able to flow through said exhaust air path means,
and
during a defrost cycle, when said first and second damper components are in said respective defrost configurations,

defrost air taken from the building, is able to circulate, for delivery back into the building, through said exhaust air intake side, through said second air stream path, then through said defrost air path means, through said first air stream path, and through said fresh air discharge side.

49. (Original) The ventilation apparatus as defined in claim 48 wherein said fresh air path means, said exhaust air path means, said rotary exchanger wheel, and said defrost air path means, are disposed in a cabinet, wherein said fresh air intake side, said exhaust air discharge side, said fresh air discharge side and said exhaust air intake side each includes one respective air opening in an outer wall of said cabinet, wherein a partition wall in said cabinet separates said exhaust air discharge side with said fresh air intake side,
and
wherein said defrost air path means comprises an opening in said partition wall.

50. (Original) A ventilation apparatus as defined in claim 49 wherein said apparatus includes fan means mounted in said cabinet for moving fresh air through said fresh air path means and for moving exhaust air through said exhaust air path means, said fan means comprising one motor and two blower wheels operatively connected thereto, said fresh air path means including one said blower wheel and said exhaust path means including the other said blower wheel.

51-52 (Previously Canceled).